ABSTRACT

Disclosed is an articulated artificial finger assembly, which can be controlled by the remaining portion of an amputated finger. An adjacent finger is used to manipulate the device when no finger is present. When the stump or adjacent finger begins to bend at the first knuckle, the rest of the device will react to the movements and articulate in the natural manner of a human finger. There are two embodiments shown which, can accommodate a variety of cases. The first embodiment relates to an amputated finger with a portion of the finger remaining. The second is used when a total finger is absent. In either case, the first embodiment uses a ring that is placed over the remaining stub of the finger and the second embodiment a ring is placed over an adjacent finger. The ring, in either embodiment, actuates upper and or lower actuation drives, which are reciprocally and transversely attached to a pivoting block. The pivoting block is fastened to an adjustable middle phalangeal section. The transversely connected upper and lower actuation drives cause the middle phalangeal section to curl under when articulated. The middle phalangeal section is comprised of two main body parts. The first is an outer phalangeal section and the second phalangeal section is placed inside the outer phalangeal section and fastened thereto. A forward fingertip section is pivotally fastened to a forward end of the inner phalangeal section. A forward end of the upper actuating drive is pivotally connected to the forward fingertip section. A supple cover is placed over the device once it is assembled. An inner supple cover is inserted into the device and sealed along the edges of the outer supple cover. To complete the device a screw is inserted into the fingertip, passing through the supple cover and is then hidden by an artificial fingernail placed thereon.